# Rural Resources, Rural Livelihoods Working Paper 13

# African Enclosures: a default mode of development?

Philip Woodhouse IDPM, University of Manchester

March 2001

# The sustainability crisis and 'good governance'.

An enduring theme in diagnoses of the causes of chronic rural poverty in sub-Saharan Africa is the failure of the rural resource base (land, water, forests, or pasture) to sustain rural livelihoods. This is true of both neo-Malthusian 'crisis' narratives (eg IFAD,1994:10; World Bank, 1996: 22-5; WRI, 1998: 3-4), and of the increasingly dominant counter-narrative which attributes abuse and degradation of rural resources to the weakening of local regulatory institutions by outside forces, variously identified as colonial government, markets, or 'centralising' African states (Moorhead, 1989; Scoones, 1994, 1996; IIED, 1999; 29). Just as the concept of 'sustainability' links the goals of social development with those of ecological conservation, so, in sub-Saharan Africa, the improvement of natural resource management is widely perceived to be the key to achieving both sets of goals. While there is continuing debate about the appropriateness of particular technical choices in managing land and water (Behnke et al. 1993; Reij et al, 1996), there is a large measure of consensus, typified in the recent Convention to Combat Desertification (CCD, 1995; Toulmin, 1995) about the need for reform of governance of these resources to allow more decentralised management and greater security of tenure for existing resource users. At the heart of this consensus, however, lie divergent and opposing views - often echoing debates from the colonial era - about the future of customary authorities in African countries, and in particular about their role in allocation of rights to use land and water and their relationship to the local state (Quan, 1997; IIED, 1999).

This paper summarises the findings of recent empirical work on the governance of changing land and water use in four African dryland areas (Woodhouse et al, 2000), and explores their implications for current debates on governance and land tenure reform in Africa.

## Local Realities: case studies of changing land and water use.

As part of a research project to study local environmental management, four case studies of 'wetlands in drylands' - key water resources in predominantly dry landscapes - were undertaken: Kimana Swamp in Kajiado District, Kenya ('Kimana'); dams in Mmutlane village, in the Shoshong Hills, in Central District, Botswana ('Mmutlane'); the Sourou valley in the Samori, Bankass cercle, Mopti region, Mali ('Samori'); and the Mutale river valley in Northern Province, South Africa ('Venda'). The purpose of the case studies was firstly to assess the evidence for change, in land and water management and in the local society and economy, and secondly to explore the nature of 'local governance', defined as: the structures and processes of power and authority, cooperation and conflict that govern decision-making and dispute resolution concerning resource access and use through the interaction of local government and non-governmental, formal and non-formal, organisations and social institutions. This definition recognises that practice and behaviour may reveal informal institutions ('rules in use') that parallel or interact with those that are formally constituted, including those of the state (cf Berry, 1993; Leach et al 1997), and reflect power relations between different stakeholders. From this standpoint, the analysis of change – and particularly moments of conflict and their outcomes – is an important way of illuminating how power is exercised and by whom. This section summarises the four case studies, which are otherwise documented in detail in Woodhouse et al (2000).

Case studies: trajectories and context

The four 'wetlands in drylands' studied occupy areas with very different historical trajectories of settlement and demographic change, communications and economic and political linkages,

<sup>&</sup>lt;sup>1</sup> The project was funded by the ESRC's Global Environmental Change Programme.

and patterns of commoditisation, all of which shape their contemporary socio-economic dynamics.

For much of the twentieth century all four areas described were relatively isolated and marginal to larger economies in terms of their agrarian production, that is, 'peripheral' in a relational, rather than residual, sense that registers their specific forms of connection, rather than lack of connection, with the development of commodity production and its spatial configurations. The formation of the Southern Maasai Reserve and relocations of Maasai pastoralists and their herds there was prompted by the early aim of the colonial state in Kenya to 'clear' land for commercial ranching by (white) settler farmers. Land alienation was also key to the trajectory of colonial, Union and republican South Africa, where the racial division of labour and political authority was further consolidated under apartheid from 1948 to 1994. This had similar effects in Venda as in other 'homelands'/bantustans, whose principal form of integration with the capitalist development of mining and manufacturing (and agriculture) was as a source of migrant labour. Colonial Bechuanaland (Botswana) was also integrated in the regional labour migration economy of Southern Africa, with the development of agricultural commodity production within its territory limited to a class of livestock accumulators (of chiefly status) and a relatively small (white) settler presence. By contrast, colonial rule in Mali brought stability to the Samori, which had lost population during the two previous centuries of insecurity as a frontier zone between Mossi and Fulani states, and opened the way for resettlement of the area by immigrant farmers. Of the four areas, the Sourou valley in Bankass exhibited most clearly the prevalence of dryland cultivation for subsistence, with the principal linkage into commodity relations also through periodic labour migration. There, if to a lesser extent than in Venda and rural Botswana, such migration is a long-established and important economic activity for young men, and increasingly now for young women too.

More recently, three of the four areas experienced significant population growth to which immigration made major contributions. Many cultivators (Kikuyu, Kamba, Chagga) have settled in Kimana since the 1950s, attracted by the availability of wetland and, since the growth of commercial horticulture, by opportunities of agricultural wage employment. In 1948 Kimana was inhabited exclusively by Maasai who now account for little more than half the population. In the Samori immigration by Dogon farmers following colonial 'pacification' has been given new impetus with the annual flooding of the Sourou valley since 1989. Recent immigrant farmers in satellite 'hamlets' now outnumber original inhabitants in the more northerly villages of the valley. The influx of immigrant cultivators to the Samori, as to Kimana, has stimulated tendencies to the commoditisation of irrigated farming and of access to the land and water it utilises. Population growth in Venda was driven by another dynamic, of course, namely the forced relocation there of rural Africans, mostly resident on farms in the 'white' countryside of South Africa's notorious 'deep North' (Northern Transvaal), through the socio-spatial engineering of apartheid. Even here, some immigrants were able to secure plots on the Tshiombo scheme when it was established, and it is principally immigrants who have exploited limited opportunities for specialised commodity production in the more remote reaches of the lower Mutale valley. The exception to these patterns of demographic growth is Mmutlane with its stable population of about 1000; the point about labour - and permanent migration from rural Botswana is illustrated by the contrast between Mmutlane and Mahalapye, a town some 30 km away on the main north-south rail and road route between Francistown and Gaberone, whose population has grown by 3.5% annually over the last twenty years or so.

Changing land and water use: intensification and commoditisation

Changing production systems display two key dynamics of resource *use*: an *intensification of* water use, resulting in higher productivity and incomes, and a *commoditisation* (increase in market exchange) in production relations.

It is not clear whether farmers' intensifying use of water has been prompted by reduced rainfall in recent decades in both the Sahel and in southern Africa (Hulme, 1996), but there seems little doubt that increased agricultural output and income has resulted for some, while diverting water from others.

- In Kimana, a pastoralist livestock system using streams and swamps for dry season fodder and water is subject to competition from stream diversion for irrigated vegetable production, and reservation of swamp areas for commercial wildlife tourism and higher rainfall upland areas for maize and beans.
- In Mmutlane permanent grazing of cattle near the village has increased pressure on pasture and water, and increased the significance of fencing to separate livestock from crops. A pattern of 'mixed arable and livestock farming' emerging among wealthier farmers, where they can obtain a borehole permit for their arable land, allows development of irrigated horticultural production and watering livestock within the arable area. This latter is not encouraged by government, however, and permits for boreholes in arable areas are rarely issued.
- In Samori, the rise in water level due to downstream dam construction has allowed the conversion of woodland and seasonal pasture to flooded rice production, estimated at an annual total of 5276 tons with a value of US\$1.2 million. This has been achieved with little apparent reduction in rainfed millet farming in the area.
- In Venda, irrigated vegetables on long-established formal (government-run) irrigation schemes face increasing water shortages, but informal (privately-funded) irrigation is expanding, while rainfed crops appear in decline. Livestock (especially cattle) production is increasingly associated with individual investments (pumps and boreholes, vehicles and water tanks) to secure access to water.

The degree of commoditisation of land and labour reflects historic conditions of market integration, but production systems in all four case studies show an underlying trend of commoditisation of *land*, irrespective of the local conditions of tenure:

- In Kimana collectively owned group ranch land is being privatised for individual tenure
  either formally, through a vote of the Group Ranch membership, or informally through
  allocations to individual group ranch members who, though they do not have formal
  individual title, gain rent through sharecropping.
- In Mmutlane, increasing pressure on local water resources for livestock is leading to restriction of access through fencing and fees, and a trend of registration and fencing of uncleared 'arable' (individualised) holdings, in a national context of privatisation (in the form of leases) of grazing land through private ownership of water (boreholes).
- In Samori, there is a *de facto* shift to market rents (as sharecropping) on land for flooded rice within *de jure* non-market 'customary tenure'.
- In Venda a *de facto* land market is created for irrigable land allocated under customary tenure, by the high entry costs of irrigated farming.

#### Resource Management/Sustainability

The studies indicated the following trends in resource use:

- *Kimana*: swamp desiccation has resulted from upstream furrow irrigation and abstraction for distant water supply. Associated clearance and cultivation of swamp land is inappropriate to the (alkali) soil type leading to severe productivity problems. Pesticide pollution of watercourses appears to be a threat.
- *Mmutlane*: fairly stable (within strong constraints of the rainfall regime) due to lack of demographic or commercial pressure, and despite government assertions difficult to substantiate of widespread soil degradation.
- Samori: the limits of floodplain rice cultivation have largely been reached. Further expansion will require some form of flood control investment to extend/regulate the flood. In coming years, productivity will be threatened by the establishment of weeds and pests characteristic of long-term rice-growing areas. Perennial weeds particularly will seriously reduce production unless further investment (more sophisticated tillage and water control) is made.
- Venda: pressure on the water resource from elsewhere in the catchment (notably large-scale commercial use upstream) is causing reduced water availability, and loss of 'tail-end' irrigated areas on formal schemes for which further investment is needed to secure more water. Expansion is principally through 'informal' irrigation, possibly now reaching its limits without further 'formal' investment.

There is little unambiguous evidence of environmental degradation. Changes in resource use have brought a net increase in overall production in Samori, and also in Kimana and Venda (if only because more people are using the resources), though possibly not in Mmutlane. The evidence of environmental change in these studies does not support the conservationist emphasis on environmental degradation in 'crisis narratives' often promoted by development agencies in Africa.

However, the studies also show that changing resource use is associated with increasing socio-economic differentiation.

- In Kimana: sharp distinctions in income (from vegetable production, and from rents) arise between those who control irrigated land, and those who do not.
- In Mmutlane: management of the cattle economy follows an 'opportunist' grazing policy, which acts as a ratchet to concentrate cattle holdings. At each successive drought, the loss of all stock by smaller herd owners proves irreversible, an effect accentuated by government ploughing subsidies which encouraged investments in tractors and reduced *mafisa* cattle loans to poorer farmers. Scope for (commercial) agricultural diversification is greater for larger farmers.
- In Samori: lineage heads with floodplain land rights gain through direct production (on better flooded land) and also through scope for sharecropping, contested as being at the expense of 'customary' rent-free loans of land to village neighbours.
- In Venda: larger farmers are accumulating irrigable land within formal schemes, and exploiting frontier opportunities for informal irrigation.

## Political dynamics

The socio-economic dynamics summarised above interact with political dynamics constituted by institutions controlling access to land and water, and by the politics of resource access at national and local levels. Of most relevance here are institutions of property and authority to allocate land (to which water rights are often attached).

In both Samori and Venda, the 'customary' dominates both property rights and allocational authority, which are largely devolved to village and lineage chiefs, appointed by the state to a

greater or lesser extent in Venda and Samori respectively. In formal terms this contrasts sharply to the position in Kimana, where 'statutory' tenure predominates through state-driven demarcation of private (individual and corporate) property rights over land, and transfers through a land market. 'Customary' rights continue to be invoked in the form of ethnically-determined prerogatives to positions of authority, such as the control of irrigation furrows, which has become a 'customary' right of Maasai despite a predominance of non-Maasai among irrigators. In terms of land allocation, the scope of customary authority has become limited to Maasai group ranch committees, elections for which reflect 'customary' allegiances of age-set and clan. In Mmutlane, an intermediate institutional form exists whereby 'customary' tenure is administered by the 'statutory' authority of government Land Boards, which control allocation of land and water (most crucially, permits to dig wells, or sink boreholes), with customary chiefs having a consultative role.

The studies show how present-day 'custom' and 'tradition' are historically shaped, hence changing over time, through interaction with particular patterns of state administration, and are open to contested interpretations. This is particularly marked in relation to commoditisation of land and water. In all four cases customary tenure is formally excluded from land markets, but can be arranged along a continuum of the extent to which marketbased access to land is accepted in practice as part of 'custom'. In Kimana, where a land market and individual freehold title predominates, market norms prevail even within the 'communal' Group Ranch land, and allocation of plots for individual members to lease out to sharecroppers is commonplace. In Botswana, the extent of formal freehold tenure of land is limited, but private property in water, in the form of boreholes and dams is leading to de facto private control of access to grazing and its subsequent formalisation as leasehold. In Venda and Samori, market-based land allocation by local customary authorities is more contested. This is evident in Samori, where the introduction of sharecropping of flooded rice by landholding lineage leaders is contested by other village residents as contrary to custom. In Venda, allocation of irrigable land by customary chiefs in the Mutale valley has been largely to individuals, not necessarily from local communities, with the capital to develop commercial irrigated production. Much of this privately-developed 'informal' irrigation is on previously uncultivated land cleared from bush, and, although one attempt to register permanent private title to the land was resisted by tribal leaders, about half of these irrigators have reinforced their claims by having their plots surveyed by the Department of Agriculture and obtaining a 'Permission to Occupy' registered with the local administrative authority.

A feature of all four case studies is the low level of institutional regulation of resource use. In all cases changing patterns of resource use were largely the result of local farmers' initiative, not due to government or development agency project interventions. Government services play an important role in providing support to arable and livestock production in Mmutlane, principally through subsidised input provision by the Botswanan state. A similar role for government services obtains nominally in both Venda and Kimana. In both cases, however, the budgetary constraints are much greater than in Botswana, and service provision through cooperative or commercial organisations tends to be more important, though not necessarily effective (the market for pesticides in Kimana appears largely unregulated, for example). In Samori, government support to the development of rice production was effectively nil, and the sole intervention of government was to contain disputes between customary village authorities or between cultivators and pastoralists. Significantly, perhaps, the Malian state's main regulatory activity in relation to resource use – the issue of permits or fines for tree cutting – was abused by officials to such an extent that they were the object of violent reprisals during the 1991 coup d'état. The subsequent relaxation of official regulation of tree cutting coincided with the rapid increase in clearance and settlement within the Samori woodland in the 1990's. More generally, both customary and government institutions regulate resource use primarily through controlling access, rather than through setting rules of use.

Summary: a default mode of development?

The case studies suggest changing land use is driven by local farmers' initiative, in response to market opportunity. Rapid change of land and water use have resulted in environmental change, but the ecological consequences of this remain ambiguous, and do not support a conservationist emphasis on interpretations of environmental degradation. What is much less ambiguous is the growing differentiation between 'winners' and 'losers' from these changes, identified in all the case studies despite highly contrasting land tenure regimes. In this sense, I suggest trends to individualisation and commoditisation of land may be understood as a 'default mode' of development in Africa. In the remainder of the paper I explore the implications of this for current debates on governance of natural resources.

#### **Governance and Land Tenure**

The experience of colonial administration continues to mark the discussion of governance in many African countries, through the maintenance of a dualism between colonial (and post-independence) state and 'customary' authority and a corresponding dualism between 'statutory' and customary systems of land tenure. Although customary tenure is identified with African authority, and statutory tenure with that introduced by European colonial administration, recent writing has increasingly abandoned any notion of customary tenure as a precolonial code of fixed rules, in recognition of the evolution of customary systems during and since the colonial period (Baland and Platteau, 1996; Lavigne-Delville, 1999) - most comprehensively argued in Mamdani's (1997) model of the 'bifurcated state' which perceives *all* African customary authorities as a legacy of the colonial experience of indirect rule which constructed for Africans a rural 'tribal' identity under chiefly authority as an means of administrative control.

The defining characteristics of present-day customary tenure are that land is inalienable, being vested in the membership of a group of 'kin' or 'community', and that it is subject to multiple and overlapping uses, and therefore not exclusive. By contrast, statutory tenure is founded on the assertion of national ownership, vested in the state, of all national territory, with a predisposition towards the emergence of private property (IIED, 1999:7).

These definitions are finely balanced, particularly in relation to the development of more individualised and exclusive access to land. It is argued (IIED, 1999:29) that under increasing demographic or commercial pressure, customary rights will become more individualised and exclusive, but that this does not mean rights will become entirely privatised. It is not clear how this view accomodates evidence for the existence of land markets under customary tenure, particularly in West Africa (Francis, 1984; IIED, 1999:35; Mortimore, 1997, Platteau, 1996), and their suppression under colonial rule (Hill, 1963; Bundy, 1979), but indicates a continuing belief that customary tenure is intrinsically a non-commoditised form of land tenure.

Peters (forthcoming) identifies three basic positions in the literature on African customary land tenure. The first of these, espoused for many years by the World Bank (eg 1989), identifies negotiability and ambiguity as characteristics of customary tenure which lead to insecurity of tenure and low rates of productivity-enhancing investment. A second view regards the negotiability and ambiguity of rights as a positive feature of customary rights that ensures continuing access for the poor and does not necessarily produce insecurity or increasing inequality. A third view shares the view of the second that ambiguity of rights under customary tenure is not necessarily a source of insecurity but argues that there is increasing inequality and privatisation of land rights. A recent Anglo-French programme of consultation on changing land rights in Africa (IIED, 1999; Toulmin and Quan, 2000) demonstrated a growing consensus rejecting the first of these positions, favouring the second, but with sufficient unanswered questions to leave open the possibility of accepting the third. More specifically, this consensus accepts that:

 customary tenure can be both secure and equitable, if customary rights are legally recognised.

- customary tenure has proved not to be a barrier to investment and increased productivity
- customary tenure offers maintenance of common property rights / secondary rights (eg firewood collection, medicinal plant use, grazing rights) which are of particular importance to the poor.
- Land tenure reform needs to recognise customary rights in individual or collective form
- Reform needs to achieve convergence between customary and statutory land tenure

It is significant that the increasing role of access to land via market mechanisms (sale, rent, sharecropping), while acknowledged in these consultations, is poorly understood: "Not enough is known about the operation of land markets in Africa....the impact of land markets on land concentration and poverty, the role of land markets in promoting rural diversification, and the importance of rental markets for the poor and for agricultural efficiency" (Quan, 2000:46)

The empirical case studies reviewed in the first part of this paper suggest that, in agreement with other writers (IIED, 1999; Quan, 1997, Platteau, 1996), customary tenure presents no obstacle to increasing productivity of land and water use. However, in support of the third position identified by Peters (2000), they also indicate that neither does customary tenure constitute a guarantor of security for the poor when competition for land intensifies and the inclusive flexibility offered by customary rights can quickly become an uncharted terrain on which the least powerful are vulnerable to exclusion as a result of the manipulation of ambiguity by the more powerful. An important reason why this is so is that, just as resource users' own initiative lay behind the increases in production from investment in more intensive water use, so the processes of commoditisation and socioeconomic differentiation are *internal* to local communities rather than imposed from outside. As such there appears little in customary tenure, or in 'community-based' models of local governance such as *gestion de terroir* (Toulmin, 1993; Evers, 1994) based upon it, to preclude *de facto* land markets developing locally, as in Kimana Group Ranch, or the rice-growing villages of the Samori, any less than under the state-administered enclosure of rangeland in Botswana.

These case studies refer to key water-related resources in dryland landscapes, the value of which has been transformed by changing use and new technology resulting in higher productivity. However, the propensity of customary authorities to realise the market value of resources has been observed in other situations where land use is changing, such as periurban areas (IIED, 1999). Indeed, holders of customary rights may resort to market relationships, such as sharecropping, with 'outsiders' to resist competing claims on their land by neighbours and kin, as in the case of the Samori, outlined above, and of cocoa-growing areas in Nigeria (Francis, 1984: 20). Rather than seeing these situations as exceptions to a non-commoditised operation of customary rights, it may be more useful to see them as becoming more generalised in future. As the quote from Quan above indicates, this is likely to be a key area of research in future. However, one implication suggested by the case studies reviewed here is that decentralisation policies which aim to strengthen customary authority over land may magnify the prospect of increasing productivity where market opportunities arise, but with uncertain consequences for the long-run sustainability of resource use and a growing socio-economic differentiation among land and water users which risks the exclusion and impoverishment of more vulnerable groups. Further, the cases of Kimana and Samori demonstrate the risks that ethnic identity associated with customary rights may become a tool of exclusion, potentially magnified, as in the Kimana case, by politicians or financiers offering to ally themselves to local customary leaders' or factions' claims over land or water in return for local political or commercial advantage.

I therefore argue that the case for strengthening customary rights over land is sustained less by the 'realities' of customary tenure than by distrust of attempts to supplant it by centrally-administered statutory land tenure. These have admittedly proved ineffective and often inappropriate, the disproportionate control exercised by government officials fostering unaccountable expropriation and a climate of insecurity particularly detrimental to more vulnerable groups of land and water users. However, it is not to deny the negative impact of state-sponsored activity in many parts of Africa to suggest that counterposing 'the state' to 'rural people' as the principal axis of conflict may be misleading. The case studies reviewed here indicates that state policy is mediated by local hierarchies which are integral to rural communities, and contradiction and conflict is a part of social change within them. This suggests that what is at issue is less the decentralisation of governance but rather what decentralisation seeks to achieve. The final section reviews options and issues confronting such a project.

#### Social change and the imperative of institutional reform

The four case studies reviewed in this paper provide examples of different approaches to local governance of natural resources. The Kenyan (Kimana) case illustrates the conversion of customary rights to private freehold, the Botswana (Mmutlane) case illustrates the administration of customary rights by a local Land Board constituted by government from locally elected representatives. In both South Africa (Venda) and Mali (Samori), recent constitutional reform has resulted in the election of local councils as part of a declared process of devolution. In both cases, the elected bodies (local councils and conseils communaux in SA and Mali respectively) are yet to be fully operational, as issues of financial and human resources have not been finalised. More critically, however, in both cases the relationship of the elected authority to the local customary authorities has not been defined, with the latter retaining control of land allocation by default. These devolutionary programmes' avoidance of the issue of customary authority over land is testament to the perceived difficulties involved. In Mali the promised review of land tenure (relecture du Code Domanial et Foncier) has failed to materialise. In South Africa public discontent with customary authorities (Adams et al, 1999; Ntsebeza, 1999) built pressure for reform culminating in the 1998 Land Rights Bill, which allowed individuals to register their existing land use, which was shelved in 2000. This underlines the centrality of conflicting political goals to any negotiation of land tenure reform.

The institutional model frequently proposed for the local (re)negotiation of land rights is that of local Land Rights Boards. These local bodies bring together customary authorities, representatives of resource users' groups, and government officials to register, monitor, and resolve conflicts in land use. They were envisaged as part of Nigeria's 1978 Land Nationalization (Francis, 1984), have recently been proposed in South Africa and Uganda and are currently being piloted in Cote d'Ivoire and Niger. While a logical 'incrementalist' approach to the reform of customary land rights offering an eventual removal of the duality between customary and statutory rights, there should be some concern that the original – and widely acclaimed – model on which it is based, Botswana's Land Boards, have presided over widening inequity of access to grazing and privatisation of rangeland (Peters, 1994).

In trying to draw lessons from empirical cases, I identify a number of issues:

- Who are the land and water users?
- The key elements of local 'land boards'
- A pragmatic approach to registration of land users' rights
- Criteria for 'sustainable' resource use.

Who are the land and water users?

The conceptualisation of rural resource users as fixed in cohesive rural village communities, using household labour in agriculture primarily directed to supply the household's immediate consumption is widely acknowledged as a fiction – albeit one with tactical utility in policy debates (Leach and Mearns, 1996; Leach et al, 1997). The use of this narrative of rural communities in many decentralisation models seems questionable in view of the empirical evidence presented here that rural resource users are highly mobile, migrating to take up opportunities to use land or water, and households commonly have urban, as well as rural, members with highly diversified livelihoods. Ellis (1999) recently characterised rural people in sub-Saharan Africa as commonly reliant on non-farm income sources for 30-50 percent of their income, rising to 80-90 percent in southern Africa. A corollary of this is that non-farm income may be critical to successful farming by funding the investment necessary to raise or maintain productivity. Within a diversified livelihood farm output may be used to generate cash to buy food or may be used to supply household members in town. Either way, the notion of 'subsistence production' is inadequate to describe small-scale farming that, while not strictly commercial, displays considerable initiative and investment by farmers in exploiting market opportunities.

# Key elements of process in 'Local Land Boards'

For this 'reality' of African rural society the key to inclusion is not tight-knit customary hierarchies, but more transparent allocation procedures in which the 'legitimacy' of customary rights and the entrepreneurial initiative of resource users is balanced by wide representation of land use interests (including groups such as pastoralists, women, and youth, normally excluded from customary land rights), and an explicit set of social goals and individuals' rights upheld by the state, and supported by appropriate professional expertise. The failure of Botswana's land boards to prevent growing inequity in rural areas may be traced to problems in the latter two: the subordination of the interests of poorer land and water users to those of large-cattlowners, and the failure to establish a meaningful dialogue between resource users and government officials to explore what constitutes 'sustainable' land and water use- resulting in conservative land use regulations that stifle local initiative. It is important to note that findings from the empirical work reported here underline that these are profoundly political goals of increased equity between resource users and between 'scientific' and artisanal knowledge. Above all, perhaps, the findings show that if such political goals are not identified and pursued by the (central) state, it is unlikely they will arise spontaneously at 'local ' level.

# Registration of land users' rights

If the state is to uphold resource users' rights under conditions of intensifying competition, then some form of registration is inescapable. However, this registration should be perceived, and implemented selectively, as a means of protecting the rights of the more vulnerable elements of society. Many writers emphasise the cost and complexity of formal registration of land rights (Adams, 1995, Adams et al 1999, IIED, 1999). However, African experience suggests this may be minimised by a pragmatic approach that registers existing customary rights, including overlapping and secondary rights on a particular piece of land, and adopts an optional register, that allows registration to be phased and priority given to areas of conflict. . It is already not unusual to find land transactions recorded in written documents formally 'witnessed' by government officials, even though no 'market' in land formally exists and such documents have no standing in law. The voluntary nature of registration avoids the destabilising imposition of statutory systems over customary rights and allows registration to be perceived as a mechanism for protecting rights that is used when it is needed. The possibility of land alienation and transfer will depend on the extent of development of land markets and the encumbrances of overlapping rights and inheritance claims to which land is subject: a residual roles of customary authorities in land allocation in Kenya is to advise when land sales should be disallowed because the seller's dependents will be left destitute as a consequence.

Criteria for 'sustainable' land use

Finally, the issue of sustainable resource use frequently throws professional resource conservation criteria into conflict with resource users' perceptions of productivity or attempts to exploit resources in new ways (Behnke et al, 1993, Fairhead and Leach, 1995; Scoones 1994; Scoones et al 1996). The development of 'land board' adjudication bodies should be seen as an opportunity to develop a dialogue between professionals and land users in order to identify agreed criteria for sustainability in land and water use.

#### References

- Adams M (1995) Land Reform: new seeds on old ground? ODI Natural Resources Perspectives No 6. Overseas Development Institute, London
- Adams M, Sibanda S, Turner S. (1999) Land Tenure Reform and Rural Livelihoods in Southern Africa.. ODI Natural Resources Perspectives No 39. Overseas Development Institute, London.
- Baland J-M and Platteau J-P (1996) *Halting Degradation of Natural Resources. Is there a role for local communities?* Clarendon Press, Oxford.
- Behnke, R, I Scoones and C Kervan. (1993) *Range Ecology at Disequilibrium*. ODI, London Berry S (1993) No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa. University of Wisconsin Press, Madison.
- Bundy C (1979) *The Rise and Fall of the South African Peasantry*. Heinemann, London CCD (1995) United Nations Convention to Combat Desertification. Text with annexes. Information Unit for Conventions, UN Environment Programme, Geneva.
- Ellis F (1999) Rural Livelihood Diversity in Developing Countries: evidence and policy implications. ODI Natural Resources Perspectives No 40. Overseas Development Institute, London.
- Evers Y (1994) Local Institutions and Natural Resource Management in the West African Sahel: Policy and Practice of Gestion de Terroir in the Republic of Mali. Rural Resources, Rural Livelihoods Working Paper 5. IDPM, University of Manchester, UK.
- Fairhead J and Leach M (1995) False Forest History, Complicit Social Analysis. Rethinking Some West African Environmental Narratives. World Development 23 (6) 1023-35
- Francis P (1984) 'For the use and common benefit of all Nigerians': consequences of the 1978 Land Nationalization. *Africa* 54 (3) 5-28
- Hill P (1963) *The Migrant Cocoa Farmers of Southern Ghana*. Cambridge University Press, Cambridge
- Hulme M (1996) Climate Change Within the Period of Meteorological Records. In : Goudie P, Adams W, and Orme A (eds) The Physical Geography of Africa. OUP, Oxford
- IFAD (1994) A Dialogue on Capitol Hill. Workshop on Land Degradation and Poverty in Sub-Saharan Africa. Challenges and Opportunities. International Fund for Agricultural Development, Rome
- IIED (1999) Land Tenure and Resource access in West Africa: Issues and Opportunities for the next Twenty Five Years. International Institute for Environment and Development, London.
- Leach M and Mearns R (1996) (eds) The Lie of the Land. UCL Press, London.
- Leach M, Mearns R and Scoones I (1997) (eds) Community Based Sustainable Development: Consensus or Conflict? IDS Bulletin 28 (4)
- Mamdani M (1997) Citizen and Subject. Contemporary Africa and the Legacy of Late Colonialism. James Currey, London
- Moorhead R (1989) Changes taking place in Common Property Resource Management in the Inland Delta of Mali. in: Berkes F (ed) *Common Property Resources: ecology and community-based sustainable development*. IUCN/Belhaven Press, London.
- Mortimore M (1997) History and evolution of land tenure and administration in West Africa. IIED Drylands Programme issue paper No 71. IIED, London.

- Ntsebeza (L (1999) Land Tenure reform in South Africa: an example from the Eastern Cape Province. IIED Dryland Programme Issue paper No 82. International Institute for Environment and Development, London.
- Peters, P. (1994) *Dividing the Commons: Politics, Policy and Culture in Botswana*. Charlottesville: University Press of Virginia.
- Peters P (forthcoming) The limits to Negotiability: security, equity, and class formation in Africa's land systems. In Lund C and Ruul K (eds) *Negotiating Property in Africa*. (publisher to be confirmed)
- Platteau J-P (1996) The evolutionary teory of land rights as applied to sub-Saharan Africa: a critical assessment. *Development and Change*, 27:29-86.
- Quan J (1997) The Importance of Land Tenure to Poverty Eradication and Sustainable Development in Sub-Saharan Africa. Natural Resources Institute, Greenwich University, Chatham.
- Quan J (2000) Land Tenure, Economic Growth and Poverty in Sub-Saharan Africa. In Toulmin C and Quan J (eds) Evolving land rights, policy and tenure in Africa. DFID/IIED/NRI, London
- Reij C, Scoones I and Toulmin C (1996) (eds) Sustaining the Soil . Indigenous Soil and Water Conservation in Africa. Earthscan, London
- Scoones I (1994) *Living with Uncertainty: New Directions in Pastoral Development in Africa.* IT Publications, London
- Scoones I and others (1996) *Hazards and Opportunities. Farming Livelihoods in Dryland Africa*. Zed Books, London
- Toulmin C (1993) 'Gestion de Terroir'. Principles, First Lessons and Implications for Action. Discussion Paper for UNSO. Drylands Programme. International Institute for Environment and Development, London.
- Toulmin C (1995) The Convention to Combat Desertification: guidelines for NGO activity. Issue paper no 56, Drylands Programme, International Institute for Environment and Development, London.
- Toulmin C and Quan J (2000) (eds) *Evolving land rights, policy and tenure in Africa*. DFID/IIED/NRI, London
- Woodhouse P, Bernstein H and Hulme D (2000) African Enclosures? The social dynamics of wetlands in drylands. James Currey, Oxford
- World Bank (1989) Sub-Saharan africa. From Crisis to Sustainable growth. World Bank, Washington
- World Bank (1996) Toward Environmentally Sustainable Development in Sub-Saharan Africa; A World Bank Agenda..
- WRI (1998) The State of the World 1998. World Resources Institute, WashingtonDC.